A NEW SPECIES OF CAMPOMANESIA (MYRTACEAE) FROM BAHIA, BRAZIL, BASED ON SPECIMENS COLLECTED BY J.S. BLANCHET OVER 150 YEARS AGO Leslie R. Landrum Marla Ibrahim U. de Oliveira

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ABSTRACT

A new species of Campomanesia Ruiz et Pav., collected by Blanchet in Bahia, Brazil, is here recognized. A description, discussion, images of collections and a key comparing Campomanesia blanchetiana Landrum & Ibrahim with two similar species, C. eugenioides (Cambess.) Legrand and C. espiritosantensis Landrum, are provided.

RESUMO

Uma nova espécie de Campomanesia Ruiz et Pav., coletada por Blanchet no estado da Bahia, Nordeste do Brasil, é reconhecida neste trabalho. São apresentadas descrição, discussão, fotografias e uma chave de identificação para comparar Campomanesia blanchetiana Landrum & Ibrahim com duas espécies semelhantes, C. eugenioides (Cambess.) Legrand e C. espiritosantensis Landrum.

KEY WORDS: Taxonomy, Moricand, Nazaré das Farinhas, old herbarium specimens

Jacques Samuel Blanchet, Swiss ambassador in Bahia, Brazil, from 1828 to 1856 and an early plant collector in that country (Staflue & Cowan 1976), has provided numerous type specimens, as can be deduced by searching the epithets containing "blanchet" in the International Plant Name Index (http://www.ipni.org/ ipni/plantnamesearchpage.do). Some genera are named in his honor, for instance Blanchetia DC. (Asteraceae) (Stafleu & Cowan 1976). Most of these taxa were recognized as new in the 19th Century, but some are still being discovered based on Blanchet collections. For example, Landrum and Funch (2008) recently described Psidium bahianum with a Blanchet collection cited as a paratype. The present new species is known to us by only four sheets, one each at F and NY, and two at G, all distributed as Blanchet collections and possibly all originally held at the Moricand Herbarium. This herbarium of ca. 50,000 specimens was amassed in the early 19th century by Moise-Etienne Moricand, a botanical associate of A. P. de Candolle (Stafleu & Cowan 1981). The two G specimens have labels indicating that they were donated in 1908 by the grandson of Moricand. Specimens of our new species have been filed as Psidium indet. and under "P. aggregatum," a nomen nudum, and Myrtus blanchetiana O. Berg (=P. salutare var. salutare; Landrum 2003) for perhaps more than 100 years. To even the trained eye, they would appear to be Psidium, but when an ovary was dissected, the 8-10-locular ovary, with 7-10 ovules per locule, clearly placed the specimens in Campomanesia (Fig. 2D). Flowering specimens of Psidium and Campomanesia are superficially very similar and many species of Campomanesia were originally described as Psidium. Fruit and seed characters separate the genera as well (Landrum and Sharp 1989), but are not available for this new species. The packet of the NY specimen contains a hand written note in Latin comparing the plant with species was written before the work of Berg on Brazilian Myrtaceae (1855-1859). Apparently Berg never saw any of the sheets, as he doubtless would have described them as new. On one of the sheets from G there is a label (in the same hand writing as the note at NY) identifying the locality of collection as Nazareth [Nazaré] das Farinhas and the collector as "M. Blanchet." Presumably, the note was not written by Blanchet, but could have been written by Moricand.

of Psidium L. (some of which are now placed in Campomanesia Ruiz et Pav.) and Myrtus L. (one of which is now placed in Calycolpus O. Berg). No species or genera of O. Berg are mentioned, so it is likely that the note

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Blanchet and "Nazaré das Farinhas." The collections attributed to Blanchet in Bahia extend from Jacobina and Rio de Contas in the interior of Bahia to the coast (Urban 1840-1857). However, many of his collections were made by others, and some Blanchet localities have still not been confirmed. More confidence can be placed in localities near the coast (A.M. Giulietti, pers. comm.). As indicated on one label, Campomanesia blanchetiana was presumably collected at "Nazaré das Farinhas" (commonly appearing on maps simply as Nazaré). Nazaré is a center for the production of "mandioca" (Manihot esculenta Crantz., Euphorbiaceae) from which the food product "farinha" is produced, which accounts the town's name. Since the time of Blanchet this area, not far from Salvador, has been drastically altered by urbanization and the cultivation of plantations of oil palm or "dendê" (Elaeais guineensis Jaquim, Arecaceae). Since our new species has not been recollected in over 150 years the chances that it is now extinct are regrettably high.

Campomanesia blanchetiana Landrum & Ibrahim, sp. nov. (Figs. 1, 2). Type: BRAZIL. BAHIA: (fl) J.S. Blanchet 1611 (HOLOTYPE: G!; ISOTYPE: F!).

Campomanesiae eugenioidii (Cambessedes) Legrand primo adspectu simillima, sed calyce ante anthesin subclauso, sub anthesi inter lobos fissus, et venis lateralibus rectis, ca. 12-binatis differt.

Tree or shrub, glabrous except for minute hairs on some young growth (especially terminal buds), and inner surface of calyx-lobes; hairs light reddish brown to whitish, less than 0.1 mm long; young twigs drying reddish brown, the bark of older twigs light brown to yellowish, remaining smooth or somewhat flaky and cracked; leaves elliptic to lanceolate, 3-10 cm long, 1.2-4.2 cm wide, 2.4-3.5 times as long as wide; apex acuminate; base cuneate to acuminate; petiole 2-4 mm long, 0.5-1 mm wide, channeled; midvein impressed above, raised prominently below; venation brochidodromous with ca. 12 lateral veins, these nearly straight, leaving the midvein at an angle of more than 45 degrees, connecting to an arching lateral vein that follows the margin, mostly within 1-2 mm of the margin; secondary veins dendritic, alternating with the laterals and seeming to arise mainly from the marginal; blades subcoriaceous, drying reddish brown to yellowish brown, densely glandular below. Flower buds broadly pyriform, to ca. 8 mm long, glabrous to minutely puberulent, the base attenuate; peduncles 10-20 mm long, 0.6-1 mm wide, glabrous to puberulent, often superimposed in pairs; bracteoles linear, caduceus before anthesis, ca. 1 mm long, ca. 0.2 mm wide; calyx nearly closed in young bud, the terminal pore gradually expanding as the bud matures, with lobes reduced to undulations along the margin, at anthesis tearing more or less regularly into 5 lobes, these broadly truncate, ca. 1.5 mm long by 3-4 mm wide, the tears not entering the staminal ring; petals suborbicular to obovate, 7-8 mm long, glandular without; hypanthium infundibular, puberulent to glabrous, densely glandular; disk (including staminal ring) ca. 5 mm across in recently opened flowers, glabrous; stamens ca. 10 mm long, ca. 325; anthers ca. 0.5 mm long; style ca. 4.5 mm long, with a swollen base; ovary 8-10-locular; ovules 7-11; fruit unknown.

Additional specimens examined. BRAZIL. Bahia: "Nazareth [Nazaré] das Farinhas," Blanchet 322 (G); "circa Bahia," Blanchet 604 (NY).

We believe that it is possible that all these Blanchet collections may be one gathering as they are all quite similar, but since they have different numbers we cite them as separate collections. Although Blanchet 322 and 604 are technically paratypes, we believe that they should be preserved with the same care as isotypes.

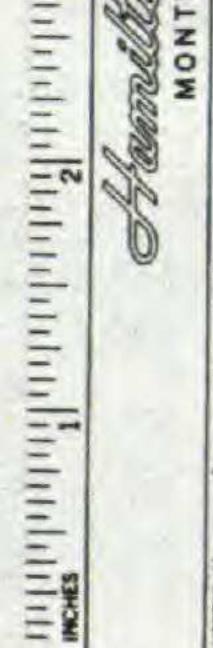
- Campomanesia blanchetiana is most similar to C. eugenioides and we compare the two in the key below.
- 1. Calyx open in young flower bud, with lobes triangular, ovate, oblong, or hemiorbicular, 1–3 mm long and wide, without tears forming between the lobes as the bud opens; lateral veins ca. 4-7 pairs, curving toward apex; leaves mainly less than 2.5 times as long as wide; stamens up to ca. 200 _____ C. eugenioides 1. Calyx nearly closed in young flower bud, with a terminal pore that gradually expands as the bud matures,
- with the lobes reduced to undulations along the margin in the closed bud, at anthesis tearing more or less regularly into 5 lobes, these broadly truncate, ca. 1.5 mm long by 3-4 mm wide; lateral veins ca. 12 pairs, nearly straight; leaves mainly more than 2.5 times as long as wide; stamens ca. 325 C. blanchetiana

Another similar species is Campomanesia espiritosantensis Landrum, known only from two collections from Reserva Florestal do Rio Doce in Espirito Santo. The two species are compared in the key below.

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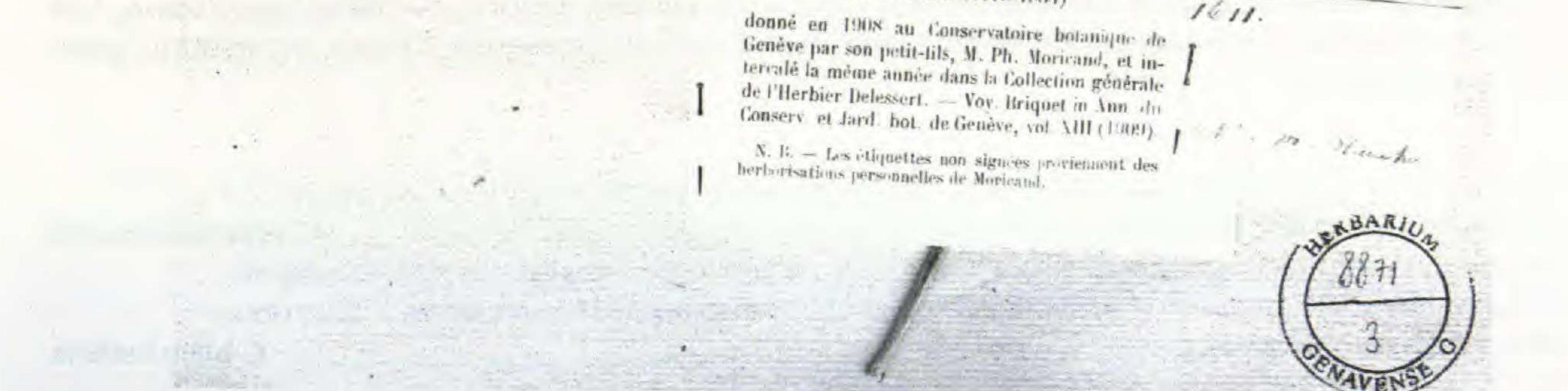


Fig. 1. Holotype of Campomanesia blanchetiana, Blanchet 1611 at G.

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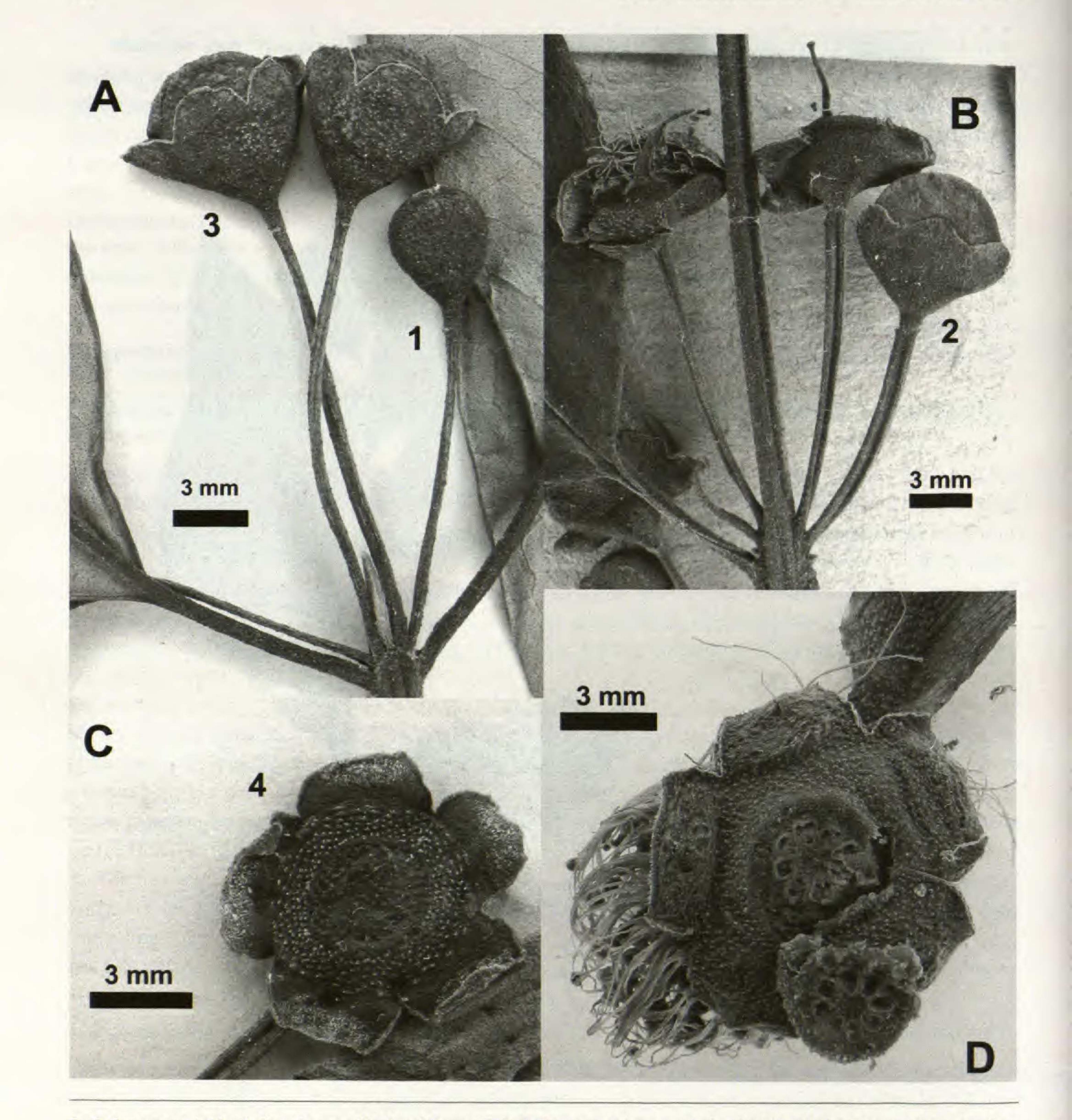


FIG. 2. Campomanesia blanchetiana, images of buds and flowers. A, B, C, flowers at various stages of anthesis; 1-4 indicate stages of opening, from

nearly closed to after anthesis. D, cross-section of ovary showing 8 locules, a typical number for Campomanesia. A, Blanchet 1611 at F; B & D, Blanchet 322 at G; C, Blanchet 604. at NY.

Calyx closed in the bud, with an apiculate apex, at anthesis tearing irregularly; peduncles solitary; leaves 2–7 cm long, commonly with pocket-like folds of tissue on the lower surface (possible domatia) ______ C. espiritosantensis
Calyx nearly closed in young bud, with a terminal pore that gradually expands as the bud matures, at anthesis tearing more or less regularly into 5 lobes; peduncles often superimposed in pairs; leaves 3–10 cm long without folds of tissue on lower surface. _______ C. blanchetiana

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